# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MARYLAND Southern Division

Precigen, Inc.	
20358 Seneca Meadows Pkwy.	)
Germantown, Maryland (Montgomery County)	
and	
PGEN Therapeutics, Inc.,	
20358 Seneca Meadows Pkwy.	
Germantown, Maryland (Montgomery County)	
Plaintiffs,	INJUNCTIVE RELIEF REQUESTED
:	
V.	Civil Action No.
Shuyuan Zhang,	)
	)
18614 Thundercloud Road	)
Boyds, Maryland (Montgomery County)	)
	)
Defendant.	)

# VERIFIED COMPLAINT AND REQUEST FOR INJUNCTIVE RELIEF AND DAMAGES (Jury Trial Demanded)

Plaintiffs Precigen, Inc. and PGEN Therapeutics, Inc. ("Plaintiffs" or "Precigen") bring this Complaint and request for injunctive relief against Defendant Shuyuan Zhang ("Defendant" or "Zhang") for Zhang's breach of his contractual obligations, as well as misappropriation and threatened misappropriation of Precigen's trade secrets and confidential information, in violation of federal and state law and in bad faith. Precigen alleges and states as follows:

#### **SUMMARY OF THE ALLEGATIONS**

1. Precigen, Inc. (formerly known as Intrexon) is a dedicated discovery and clinical stage biopharmaceutical company that holds a variety of health care assets, including its wholly-owned subsidiary PGEN Therapeutics, Inc. ("PGEN Therapeutics"). Zhang was a

high-level Director at Precigen, including more recently on behalf of PGEN Therapeutics, for nearly a decade, holding the title of Executive Director of Chemistry, Manufacturing, and Controls ("CMC"). In this position, Zhang gained intimate knowledge and familiarity with many of Precigen's most sensitive research and development programs.

- 2. As a condition of his employment within Precigen, then Intrexon, Zhang executed a Confidentiality and Proprietary Rights Agreement ("Agreement") on June 16, 2011. That Agreement is attached hereto as Exhibit A. Under the terms of that Agreement, Zhang agreed not to disclose Precigen's trade secret and confidential information, to refrain from using such information to benefit himself or a third party, for example, by permitting that party to file patent applications with him named as an inventor, and to refrain from accepting employment with a direct competitor for one year after departing Precigen. Despite agreeing to these terms, Zhang has engaged in the foregoing activities, thereby necessitating injunctive relief to avoid immediate and irreparable harm to Precigen.
- 3. Specifically, Precigen has learned that, while employed at Precigen, Zhang collaborated with a competitor located in China, Sinosheng (Shenzhen) Gene Industry Development Co. ("Sinosheng" or d/b/a "Sibiono"). Zhang permitted himself to be named on at least three international patent applications filed on behalf of Sibiono, each of which is directed to subject matter that overlaps with research in which Precigen is actively engaged, or was previously engaged, while Zhang was employed at Precigen. Zhang concealed his collaborative efforts with Sibiono and its associated patent filings from Precigen, in breach of his Agreement.
- 4. In February 2020, as part of its routine competitive monitoring activities, Precigen uncovered the Sibiono-filed applications. Although the applications named "Shuyuan

Zhang" as an inventor, Precigen understood that this was a common Chinese name and thus did not initially believe that the named inventor was Defendant Zhang.

- 5. On or about May 1, 2020, Zhang gave Precigen two-week notice that he was leaving the company. That resignation letter is attached as Exhibit B hereto. A few days later, Zhang informed his supervisor, Dr. Bryan T. Butman, Vice-President and Head of CMC at Precigen, that he had accepted employment with Arcellx, Inc. ("Arcellx"). Zhang told Dr. Butman that there was no cause for concern because Arcellx did not directly compete with Precigen. On May 15, 2020, Zhang formally resigned from Precigen. Following so closely upon the heels of Precigen's discovery of the Sibiono-filed patent applications naming "Shuyuan Zhang" as an inventor, Zhang's announced resignation raised concerns. Precigen's in-house attorney, Dr. Doyle Siever, participated in Zhang's exit interview. When Dr. Siever asked Zhang about one of the Sibiono-filed applications, Zhang hesitated, then denied knowledge of the application, the company named on the application, and noted that the names of the co-inventors on the application were common Chinese names. Dr. Siever reminded Zhang about his ongoing obligation to protect Precigen's trade secret and confidential information and to return any and all Precigen confidential information. Zhang informed Dr. Siever that he would no longer possess any such information because he was returning his company-issued computer that same day.
- 6. Two days later, on Sunday, May 17, 2020, Zhang told an altogether different story. Specifically, Zhang telephoned his former supervisor, Dr. Butman at home and admitted that he had suffered "bad judgment." In particular, Zhang told Dr. Butman that, in fact, he did know the Chinese company that filed the patent application referenced in his exit interview and that, in fact, he is the same individual named on that patent application.

- 7. Immediately after Zhang's conversation with Dr. Butman, Precigen initiated a detailed review of the Sibiono-filed applications and Zhang's potential contributions thereto. From that review, Precigen has since discovered that one of the Sibiono-filed applications contains a unique image of a protein blot identical to one Precigen prepared as part of a confidential, non-public application to the U.S. Food & Drug Administration ("FDA") weeks before Sibiono filed its patent applications. Zhang transmitted that then-confidential Precigen figure to Sibiono without Precigen's knowledge or consent, and in violation of his Agreement.
- 8. Precigen also initiated a forensic review of Zhang's company-issued electronic devices. Before he departed, Zhang returned to Precigen his company-issued iPhone and one of two company-issued laptop computers. Precigen determined that Zhang, without authorization to do so, had reset the iPhone back to its factory settings before returning it, effectively removing all the data from the phone and making it impossible for Precigen to determine whether he had used this device to engage in any misappropriations of its trade secret and confidential information. Precigen has determined that Zhang, without authorization, deleted numerous files from the work-issued laptop that he turned in. In addition, Zhang failed altogether to return a second work-issued laptop, thereby amplifying Precigen's concerns that he continued to possess sensitive Precigen information.
- 9. Given Zhang's blatant and unauthorized disclosure of Precigen's confidential information and know-how to Sibiono that it had uncovered in the immediate wake of Zhang's departure from the company, Precigen also commenced a careful review of Zhang's new employer, Arcellx. Precigen has learned that, despite Zhang's representations to the contrary made to Dr. Butman, Arcellx directly competes with Precigen in at least the CAR-T technology space, as described later herein. Accordingly, Zhang's decision to accept employment with Arcellx, where

he will be developing products and methods in direct competition with Precigen's own, constitutes an additional breach of Zhang's Agreement. Precigen is especially concerned about this breach given what it has learned of Zhang's recent activities coupled with his intimate familiarity with Precigen's most sensitive research projects, particularly in the area of manufacturing CAR-T therapies. It is highly likely that, if not enjoined, Zhang will continue misappropriating, misusing, and/or disclosing Precigen's trade secrets and confidential information in the course of his employment with Arcellx. Moreover, it is almost certain that Zhang will work on matters at Arcellx that are actively being researched, discovered, or developed by Precigen, in further violation of his Agreement. Indeed, Zhang has already commenced employment with Arcellx.

discovered in only a very short period of time, it is highly likely that discovery in this matter will reveal additional unlawful conduct, including additional breaches of Zhang's contractual agreements and/or misappropriation of trade secrets, know-how, and confidential information. Nevertheless, in an effort to avoid legal action, Precigen requested, and Zhang agreed to, an in-person interview on June 1, 2020 at Precigen's Maryland offices. Precigen had hoped that Zhang would be able to satisfactorily address its myriad concerns. This did not occur. Instead, during that interview, Zhang denied, then admitted to multiple and ongoing violations of his Agreement, including that he had been consulting and communicating with Sibiono for many years, that these communications often occurred via WeChat, and that he had sent Sibiono confidential Precigen information. Moreover, Zhang's pattern during the interview of offering denials and evasive and incomplete answers, followed by admissions, only raises more questions and concerns about the scope of his use and dissemination of Precigen confidential information. Additionally, during the course of the interview, and at Precigen's request, Zhang retrieved from

his home the second work-issued laptop computer that he had repeatedly failed to turn in beforehand. Unfortunately, Precigen has discovered that, prior to surrendering his second laptop, Zhang apparently installed a new operating system on it, thereby again depriving Precigen of the opportunity to scrutinize fully Zhang's treatment of Precigen's trade secret and confidential information and resulting in the loss of confidential Precigen information.

In view of the foregoing, Precigen requests temporary, preliminary, and 11. permanent injunctive relief to enforce Zhang's contractual obligations to prevent him from continuing his employment with Arcellx without, at a minimum, Precigen first having an opportunity to understand the full gravity of the unlawful conduct in which Zhang has been engaged and: to obligate Zhang to return any and all confidential Precigen information in his possession in any format; to assign affirmatively to Precigen any patent applications that Zhang has materially contributed to, or that name him as an inventor, whether public or not; to seek assignment of all such patent applications from Sibiono to Precigen forthwith; to remit to Precigen any and all electronic storage and repository devices, personal and professional, so that those devices can immediately be secured and investigated to detect any additional significant and likely wrongdoing; and to preserve the status quo to the extent possible in view of the considerable damage Precigen may have already suffered. Without such relief, the likelihood of irreparable harm flowing from Zhang's employment with Arcellx in a directly competitive capacity, as well as the threatened additional disclosure of Precigen trade secret and confidential information to Sibiono, is unreasonably high.

#### PARTIES, JURISDICTION, AND VENUE

12. Precigen, Inc. is a corporation duly formed and existing under the laws of the Commonwealth of Virginia, with its principal place of business at 20358 Seneca Meadows

Pkwy., Germantown, Maryland, within this judicial district. PGEN Therapeutics is a corporation duly formed and existing under the laws of Delaware and a wholly-owned subsidiary of Precigen, Inc. It shares its principal place of business with Precigen, Inc.

- 13. Upon information and belief, Zhang is a resident of the State of Maryland and resides at 18614 Thundercloud Road, Boyds, Maryland, within this judicial district.
- 14. Until recently, Zhang was employed by Precigen's wholly-owned subsidiary, PGEN Therapeutics as Executive Director of CMC, Biologics, and Zhang reported to work at Precigen's location in Germantown, Maryland. Zhang has already begun employment with Arcellx, which is located in Gaithersburg, Maryland.
- 15. Jurisdiction is proper in this district pursuant to 18 U.S.C. § 1836, as well as 28 U.S.C. § 1331, § 1338, § 1367, and § 2201. This Court has original jurisdiction over this action by virtue of 28 U.S.C. § 1331, as this cause of action arises under the Defend Trade Secrets Act, 18 U.S.C. §§ 1831, *et seq.* This Court has supplemental jurisdiction over claims arising under state law pursuant to 28 U.S.C. § 1367(a), as the claims at issue are so closely related that they form part of the same case or controversy.
- 16. Zhang is subject to personal jurisdiction in this Court by virtue of, among other things, being a citizen and resident of Maryland, doing business in Maryland, and entering into the Agreement out of which this litigation arises in Maryland.
- 17. Venue is proper in this District pursuant to 28 U.S.C. § 1391(b)(2) because a substantial part of the events or omissions giving rise to the claims occurred in this District, and Defendant resides in this District.
- 18. Additionally, the parties agreed that any lawsuit to enforce the Agreement may be brought in Maryland. Ex. A,  $\P$  15(iv).

19. Assignment to the Southern Division is proper under Local Rule 501(4)(b)(ii) since all parties reside in that division.

#### FACTUAL BACKGROUND

#### The Technology, Precigen, and Precigen's Competitors

- 20. Precigen (f/k/a Intrexon Corporation) is a biopharmaceutical company that focuses on gene and cell therapy. It uses its proprietary technologies and know-how to genetically modify cells for treatment of various diseases.
- 21. Specifically, Precigen develops next-generation gene and cell therapies using precision technology to target the most urgent and intractable diseases in immuno-oncology, autoimmune disorders, and infectious diseases. The company, through its proprietary technologies, designs, builds, and regulates genetic systems. Precigen's technologies include: UltraCAR-T<sup>®</sup>, chimeric antigen receptor T (CAR-T) cells reprogrammed using non-viral multi-gene delivery system to target and kill cancer patient's tumor cells; *Sleeping Beauty* System, a transposon/transposase system for stably reprogramming immune cells; AttSite<sup>TM</sup> recombinases, which enable targeted non-viral gene delivery; AdenoVerse<sup>TM</sup>, a library of adenoviral vectors for efficient gene delivery of vaccine antigens; ActoBiotics<sup>®</sup>, a microbe-based biopharmaceutical platform that enable expression and local delivery of disease-modifying therapeutics, and cytokines; and RheoSwitch Therapeutic System<sup>®</sup>, a highly-regulatable inducible gene switch.
- 22. Precigen also provides reproductive technologies and other genetic processes to cattle breeders and producers, including genetic preservation and cloning technologies, and genetically engineered swine for medical and genetic research.
- 23. Precigen's technologies and products are used in, or intended for use in, both interstate and foreign commerce. Specifically, Precigen's technologies and products are used

both nationally and internationally, and it offers and sells its proprietary technologies throughout the United States and the world.

- 24. Precigen utilizes its various technology platforms to enable it to find innovative solutions for affordable biotherapeutics. The company operates as an innovation engine progressing a preclinical and clinical pipeline of well-differentiated unique therapies toward clinical proof-of-concept and commercialization. The fields in which Precigen operates are rapidly evolving and highly competitive.
- 25. One such field is cancer therapy. Precigen is currently working on several cancer therapies that aim to provide broader patient access to life-saving cancer treatments. For example, the company's chimeric antigen receptor T ("CAR-T") cell therapy platform is fundamentally differentiated from its competitors' platforms in that it has faster manufacturing times and lower manufacturing costs, and aims to improve outcomes using advanced technologies for precise tumor targeting and control of the immune system. Precigen is currently evaluating two CAR-T treatments in clinical trials, one that targets advanced ovarian cancer and another that targets blood cancers, such as relapsed or refractory acute myeloid leukemia and higher-risk myelodysplastic syndrome.
- 26. In addition, Precigen is developing multiple adenovirus-based gene therapies for immune-oncology applications. One such candidate therapeutic, designed to target HPV+ cancers, has been granted clearance by the FDA to initial Phase I/II trial. Precigen's AdenoVerse<sup>TM</sup> platform utilizes a library of proprietary adenovectors for the efficient gene delivery of vaccine antigens and cytokines to modulate the immune system. The company uses proprietary gorilla adenovectors, which are potent, have high payload capacity, and are amenable to repeated patient administration.

- 27. Precigen has competitors both nationally and globally, especially in the adenovirus-based gene therapy, cell therapy, and cancer therapeutic fields. One such competitor is the company Sibiono, located in China, which represents itself as "the world's innovator and leader in gene therapy" whose "innovative product Gendicine® [is] an adenovirus-based recombinant human p53 for injection (rAd-p53, Inj) [that] was approved by the China Food & Drug Administration (SFDA)" in 2003. *See* Sibiono, About Us Introduction, http://www.sibiono.com/en/company.aspx. According to Sibiono, it owns six "invention patents" covering gene therapy and the use of Gendicine®. *See id*.
- 28. Sibiono boasts "a team of over 1000 specialists employing Gendicine®, in addition to the 300 oncologists from AAA Hospitals on the panel of clinical specialists, who are in charge of further investigation on cancer gene therapy." *See id.* "We advocate full strength R&D in the extension of cancer treatment application and individualized cancer gene therapy center." *See id.* To help achieve its aims, Sibiono has organized an "expert panel," which it calls the "Sibiono Science and Technology Experts Committee," or SSTEC for short. *See* Sibiono, About Us SSTEC; http://www.sibiono.com/en/company.aspx?Cateid=47. Notably, one of the experts listed on the SSTEC is "S Y Zhang (PhD, Surry)," who is described as "a well-known GMP designer" who has been "trained in cell engineering and has been working with viral vector delivery of gene, viral vector vaccine and gene-modified cell vector for nearly 2 decades." *See id.* Upon information and belief, the individual referenced is Defendant Zhang, who, according to his *curriculum vitae*, obtained his Ph.D. from the University of Surrey in the United Kingdom. Zhang's *curriculum vitae* is attached hereto as Exhibit C.
- 29. A Precigen competitor closer to home is Arcellx, which is based out of Gaithersburg, Maryland, just a few miles from Precigen's own headquarters in Germantown,

Maryland. Like Precigen, Arcellx develops adaptive cell therapies to treat human cancers. Arcellx represents itself as a "development-stage company founded in 2015" that is "devoted to providing patients with superior immune cell therapies" with an "initial clinical focus [on] cancer therapy." *See* Arcellx, About Us, http://www.arcellx.com/#aboutus.

- 30. According to news reports, Arcellx is developing its own CAR-T therapies. See, Myeloma Research News. dated March 18, 2020, e.g., https://myelomaresearchnews.com/2020/03/18/fda-names-arcellxs-cell-therapy-cart-ddbcma-orp han-drug-for-multiple-myeloma/. One of Arcellx's CAR-T candidate therapies recently was granted orphan drug status by the FDA for the treatment of multiple myeloma. See id. This follows the FDA's granting of fast track designation to the therapy for the blood cancer relapsed or refractory myeloma, and provides Arcellx with various incentives, such as assistance in developing trial protocols and a seven-year period of market exclusivity once the treatment is approved. See id. Arcellx is currently initiating a Phase 1 trial (NCT04155749) testing its CAR-T therapy in relapsed and refractory multiple myeloma. See id.
- 31. Upon information and belief, Zhang's services rendered to Sibiono, including to its core research and technology areas of adenovirus-based gene therapy and cancer therapeutics, relied on and/or made use of Precigen's confidential information. For example, Zhang transmitted what was, at the time, confidential CAR-T-related experimental results to Sibiono, who then included that same information in at least one of its international patent applications. Worse, Sibiono passed this information off as its own, and is now claiming patent rights based on it. In a similar vein, Zhang is likely to have no compunction in providing confidential Precigen information or know-how to Arcellx in its core area of CAR-T therapies. At the very least, Zhang's employment in a research and development capacity at Arcellx,

particularly in the competitive field of gene therapy, creates a substantially high risk of misappropriation of confidential Precigen information.

### Zhang's Expertise and Relevant Knowledge of Precigen's Trade Secret Information

- 32. Zhang was employed by Precigen (f/k/a Intrexon) from August 15, 2011 to May 15, 2020. Ex. C. Before joining Precigen, Zhang held various high-level positions in Operations and Product and Process Development in the areas of manufacturing, vaccine development, and therapeutics, including positions in which he managed or directed development activities for adenoviral and adeno-associated viral vectors, lentiviral vector vaccines, plasmid products, and gene-modified cell products. Ex. C. Zhang's duties in his role as Executive Director of CMC included directing and overseeing activities related to manufacturing of CAR-T therapies and viral and non-viral gene delivery systems. *Id*.
- 33. Zhang received a Ph.D. in Large Scale Cell Culture Technology from University of Surrey, U.K. in 1993, a Masters in Biochemical Engineering from East China University of Science and Technology, Shanghai, China in 1987, and a Bachelor's of Science in Organic Chemistry from Tianjin University, Tianjin, China in 1984. Ex. C. Zhang is also an inventor on more than a dozen patents.
- 34. Zhang's *curriculum vitae* indicates that he has "[m]ore than 25 years GMP experience in large scale cell culture in bioreactors and chromatographic purification," has "[c]omprehensive knowledge in biotech product development from cell banking, large scale cell culture, ex vivo cell product production, downstream processing and chromatographic purification, to formulation, lyophilization and finish," and has "[e]xtensive knowledge in FDA and EMEA regulations and guidance for GMP development and production of vaccine and gene therapy vector products." Ex. C.

- 35. In his nearly nine years at Precigen, Zhang was involved in more than two-dozen highly confidential research programs, including various CAR-T technology programs and recombinant adenovirus ("rAd") gene therapies. Zhang is an expert in gene and cell therapy, including manufacturing processes related to UltraCAR-T, viral vectors, plasmid DNA, methods of gene delivery/DNA transfection, cell genome modification, and regulation of gene expression.
- 36. Precigen has invested tens of millions of dollars in research and development related to viral and non-viral gene therapies, and has acquired significant know-how and trade secret intellectual property around the manufacturing and development of rAd and CAR-T gene therapies. Zhang has been heavily involved in research and development efforts.
- 37. Sibiono purports that it has successfully built a research and development platform around viral and non-viral vectors for gene therapy drugs, as well as various technology platforms for mass-producing recombinant adenovirus gene therapies. *See* http://www.sibiono.com/en/company.aspx?Cateid=49. Sibiono's website indicates that the company's focus is in the area of 'rAd' preparation standardization, small scale development, and mass production. *See* http://www.sibiono.com/en/company.aspx?Cateid=49.
- GenVec, Inc., a clinical-stage biopharmaceutical company and pioneer in the development of AdenoVerse<sup>TM</sup> gene delivery technology. *See* https://www.prnewswire.com/news-releases/intrexon-integrates-leading-adenoviral-gene-deliver y-technology-with-completion-of-genvec-acquisition-300475225.html. Precigen's acquisition of GenVec positions it to create the next generation of adenoviral (AdV) delivery with significantly higher payload capacity as compared to competitors' viral delivery methods through a scalable manufacturing platform utilizing helper-dependent adenovirus. *See id.* This expanded capacity

will further advance the field of gene-based medicine by enabling delivery of multiple therapeutic effectors. As such, any access by Sibiono to Precigen information regarding its adenoviral manufacturing and production technology, including, for example, large-scale cell culture, FPLC 1-step column purification, HPLC analysis, and quality control standardization, would be damaging. Zhang is intimately familiar with all of these technologies and, indeed, spent a considerable amount of time at Precigen analyzing, developing, and contributing to these technologies.

- 39. Arcellx's website describes it as a cell therapy company with a pipeline that includes programs in oncology, autoimmune, and solid tumor indications. *See* http://arcellx.com/. Arcellx states that its lead programs include Chimeric Antigen Receptor T (CAR-T) cells with a focus on BCMA and CD123 targets, both of which have been targets pursued by Precigen. *See* http://arcellx.com/#platform. Arcellx additionally states that its "innovating immune cell therapies aim to achieve," among other things, a "streamlined manufacturing of immune cell therapies." *See* http://arcellx.com/#aboutus.
- 40. Like Arcellx, Precigen is heavily invested in the CAR-T space. Precigen's product pipeline includes CAR-T cells in oncology and solid tumor indications for which Precigen has secured commercial rights and invested significant research and development costs. *See* https://precigen.com/pipeline/. More specifically, Precigen has spent considerable resources on improving CAR-T manufacturing and, indeed, has succeeded in achieving one-day manufacturing times. Precigen has also established significant know-how and trade secret intellectual property around a variety of CAR-T targets and gene delivery mechanisms, including both viral and non-viral means. *See* https://precigen.com/science/#technology-platforms. Zhang has directly

participated in and/or had access to all of these technologies during his time at Precigen. Such innovations, if known by Arcellx or other competitors, would significantly prejudice Precigen.

#### **Zhang's Confidential and Proprietary Rights Agreement**

- 41. Precigen hired Zhang in 2011, and the parties executed the Agreement attached hereto as Exhibit A. This Agreement constitutes a valid, enforceable contract. *See* Ex. A. Precigen owns all right, title, and interest in the Agreement.
- 42. Pursuant to the Agreement, Zhang acknowledged that he would have access to Precigen's confidential, proprietary, and/or trade secret information, and he agreed to keep that information confidential. Ex. A,  $\P$  1.
- 43. Specifically, Zhang promised, "I will protect the confidentiality of Confidential Information both during and after my employment (or consultancy) with or by the Company." Ex. A,  $\P$  2. He further agreed not to disclose or disseminate confidential information to any third party, not to remove confidential information from the premises, not to use confidential information for his own benefit, and to take all actions to avoid unauthorized disclosure. *Id*.
- 44. Regarding any information that Zhang was uncertain was confidential, he agreed to "treat that information as Confidential Information until I have verification from an authorized officer of the Company" that it is not. Ex. A,  $\P 2$ .
- 45. Zhang agreed that all inventions that "relate[] directly or indirectly to or arise[] out of the actual or proposed business . . . of the Company," including research and development or works based on Precigen's confidential information, "belong to the Company even if I create, make, conceive or reduce them to practice on my own time." Ex. A, ¶ 7. He further committed to provide "full written disclosure" of any such works or inventions to Precigen. *Id*.

- 26. Zhang "irrevocably assign[ed]" all rights in any invention, and explicitly acknowledged that "any and all patents, patent applications or other intellectual property rights relating to the Inventions are the exclusive property of the Company." Ex. A,  $\P$  7. He also agreed to cooperate with Precigen related to the procurement, maintenance, and enforcement of such intellectual property rights. *Id*.
- 47. The Agreement contained a section entitled, "Restrictions on Unfair Competition." Ex. A, ¶ 11. Zhang acknowledged that Precigen "is engaged in a unique and specialized industry, and faces competition on a worldwide basis," and that through his association with the company, he "will acquire a considerable amount of knowledge and goodwill" that are "extremely valuable" and could be "extremely detrimental" if used to compete with Precigen. *Id*.
- 48. Accordingly, Zhang promised that, "for a period of one (1) year" following his employment with Precigen, he would not "directly or indirectly engage in any business" or "render services" to any business that "competes with the Company in business of research, discovery and/or development of products that are being actively researched, discovered or developed by the Company at the time of termination." Ex. A, ¶ 11. This restriction is reasonably limited in scope and expressly permits Zhang to accept employment "in any capacity" so long as that employment "does not involve work or matters related to the business of research, discovery and/or development that are being actively researched, discovered or developed by the Company at the time of termination of [Zhang's] employment." *Id*.
- 49. Zhang agreed that "[a] violation or even a threatened violation of this Agreement is likely to result in irreparable harm to the Company ...." Ex. A, ¶ 13. "Accordingly, the Company may obtain an injunction prohibiting me from violating this Agreement, an order

requiring me to render specific performance of the Agreement, and/or other appropriate equitable remedies." *Id.* 

#### Zhang's Access to, and Knowledge of, Precigen's Valuable Trade Secrets

- 50. In connection with its business, Precigen has developed a number of trade secrets, including but not limited to, detailed scientific and business information relating to gene and cell therapy, including manufacturing processes related to UltraCAR-T, methods of gene delivery/DNA transfection, rAD gene therapies, cell genome modification, and regulation of gene expression. Precigen has developed these trade secrets through coordinated efforts of its employees working at Precigen's locations both in the U.S. and internationally.
- 51. These trade secrets give Precigen a significant competitive advantage not enjoyed by other companies who do not possess them. By way of example, they enable Precigen to more quickly advance research and development for the commercialization of human therapeutics and products in other fields as or more effectively than its competitors.
- 52. Precigen's trade secrets are not generally known to, or readily ascertainable through proper means, by individuals outside of Precigen.
- 53. Precigen has invested considerable time, effort, and expense in developing its trade secrets.
- 54. Precigen has used, and continues to use, reasonable and diligent efforts to protect its trade secrets, know-how and confidential information, including requiring all persons with access to execute agreements with non-disclosure and other restrictive covenants as a condition of employment, requiring attorney review and approval prior to any proposed or requested public disclosure of Precigen data and other information, limiting access to proprietary information to those with a need to know, employing strict information technology security

regimens, and restricting access to each of its offices and laboratories to employees and visitors who show identification and are escorted by employees.

55. Indeed, it was a direct result of Precigen's diligent efforts to protect its intellectual property that led it to discover Zhang's unlawful activities that give rise to this Complaint, including the naming of Zhang as an inventor on at least three international patent applications filed by Sibiono during Zhang's employment with Precigen, Zhang's unauthorized disclosure of confidential Precigen information to Sibiono, and his tampering and/or deletion of data from his three company-issued electronic devices.

#### The Sibiono-Filed Patent Applications

- 56. Zhang is named as an inventor on at least three Sibiono-filed international patent applications ("the Applications").<sup>1</sup>
- 57. Application Number PCT/CN2018/103655 is based on a national patent application first filed in China on April 27, 2018 (CN/201810392435.3), and was filed as an international patent application on August 31, 2018, wherein it published as WO/2019205403A1 on October 31, 2019. This Application, along with a machine translation of it, is attached as Exhibit D. It is entitled "Genetically engineered natural killer cell product for treating tumor." The application names Zhang as an inventor and lists Syno (Shenzhen) Biomedical Research Co., Ltd as the assignee (owner). It generally discloses and claims a genetically-engineered natural killer cell product for treating cancer. The subject matter disclosed in this application involves and/or overlaps with confidential Precigen subject matter that Zhang worked on, or was in possession of, during his term of employment with Precigen.

<sup>&</sup>lt;sup>1</sup> The Patent Applications appear to have been originally assigned to and re-assigned to variations of the same company, all of which are believed upon information to be related to the company referred to herein as Sibonio, including the entities of Syno (Shenzhen) Biomedical Research Co., Ltd. and Sinosheng (Shenzhen) Gene Industry Development Co., Ltd.

- 58. Application Number PCT/CN2018/103656 is based on a national patent application first filed in China on June 28, 2018 (CN/201810686129.0), and was filed as an international patent application on August 31, 2018, wherein it published as WO/2020000636A1 on January 2, 2020. This Application, along with a machine translation of it, is attached as Exhibit E. It is entitled "Method for producing recombinant adenovirus." The application names Zhang as an inventor and lists Sinosheng (Shenzhen) Gene Industry Development Co., Ltd as the assignee. It generally discloses and claims methods for producing a recombinant adenovirus, as well as a packed bed bioreactor for re-amplification and harvesting of a recombinant adenovirus. The subject matter disclosed in this application involves and/or overlaps with subject matter involving knowledge and expertise possessed, and further acquired, by Zhang during his term of employment with Precigen.
- 59. Application Number PCT/CN2019/095482 is based on national patent applications filed in China on July 27, 2018 and June 18, 2019 (CN/201810846001.6 and CN/201910527599.7, respectively) and was filed as an international patent application on July 10, 2019, wherein it published as WO/2020019983A1 on January 30, 2020. This Application, along with a machine translation of it, is attached as Exhibit F. It is entitled "Genetically engineered cell used for treating tumour" ("WO/2020019983"). The application names Zhang as an inventor and lists Sinosheng (Shenzhen) Gene Industry Development Co., Ltd as the assignee. It generally discloses and claims human immune cells that simultaneously express a chimeric antigen receptor (CAR) for a tumor antigen and a safety kill switch factor. The subject matter disclosed in this application involves and/or overlaps with confidential Precigen subject matter that Zhang worked on, or was in possession of, during his term of employment with Precigen.

- 60. Upon information and belief, WO/2020019983 incorporates confidential information of Precigen, including at least a figure displaying the presence of a particular protein that Precigen prepared for submission in a confidential, non-public application to the FDA prior to the filing of WO/2020019983.
- 61. Under international patent laws, patent applications are typically published 18 months after their filing date. Due to the period of time during which patent applications remain non-public, Precigen is unable to ascertain at this time whether Zhang may have been involved in the filing of additional patent applications, or named as an inventor on additional patent applications, filed by Sibiono within the last 18 months.

#### **Zhang's Wrongful Actions**

- 62. On or about May 1, 2020, Zhang advised Precigen of his intent to resign his employment. Zhang's acceptance of immediate employment with, Arcellx, a direct competitor to Precigen, is a clear breach of the Agreement. Ex. A, ¶ 11. Moreover, as detailed herein, such employment is highly likely to lead to Zhang's disclosure of Precigen's confidential information in violation of the Agreement. Ex. A, ¶ 2.
- 63. Upon information and belief, Zhang has been secretly assisting Sibiono, including serving as a member of the company's SSTEC advisory board and transmitting confidential information to it. This assistance is contrary to the Agreement, which precludes Zhang from working for a competitor during the term of his employment, and from disclosing confidential information. Ex. A,  $\P$  2, 11.
- 64. Indeed, upon information and belief, Zhang secretly assisted Sibiono and/or its subsidiaries or related entities in preparing for and filing at least three international patent

applications ("Applications"), at least one of which disclosed confidential Precigen information that Zhang learned only through his employment with Precigen.

- 65. That assistance included, but was not limited to, transmitting to Sibiono the confidential Precigen protein blot data that Zhang reviewed and commented on as part of his duties as a member of Precigen's CMC team.
- 66. Zhang did not inform Precigen of the Applications, nor did he ask for Precigen's consent to disclose its confidential information to Sibiono.
- 67. On their face, the Applications are assigned to Sinosheng (d/b/a/ Sibiono). None of the Applications acknowledges Precigen's contribution to the alleged inventions disclosed therein, nor indicates Precigen's ownership rights to those inventions.
  - 68. The Applications have now all published.
- 69. Zhang has caused Precigen extraordinary harm by disclosing its confidential information to a competitor, and permitting that competitor to seek patent protection for inventions that rely on that same information. Such patent protection, if granted, has the potential to constrain Precigen's own ability to practice the subject matter disclosed therein, thereby precluding Precigen from practicing its own technology.

# COUNT I – BREACH OF THE AGREEMENT Maryland Common Law

- 70. Precigen incorporates each of the foregoing numbered paragraphs 1-69 of this Complaint as if fully set forth herein.
- 71. Zhang agreed to abide by the terms of the Agreement, including Confidential Information Obligations, Ownership of Works, Ownership of Inventions, and Restrictions on Unfair Competition.

- 72. These provisions governing the non-disclosure of Precigen's confidential information and restrictions in unfair competition are reasonable and no greater than fairly required to protect and preserve Precigen's legitimate protectable interests
  - 73. Precigen has performed all obligations owed to Zhang.
- 74. Zhang materially breached the Agreement by consulting with and/or working for Sibiono in an area that competes with Precigen.
- 75. Zhang materially breached the Agreement by disclosing Precigen's confidential information to Sibiono and publishing it to the world in the Applications.
- 76. Zhang also breached the Agreement by accepting employment with Arcellx, where, in violation of the Agreement, he will undoubtedly work on technologies competitive to Precigen's own and on which he worked while employed at Precigen and had access to trade secret and confidential information.
- 77. The work that Zhang contemplates doing for Arcellx is highly likely to lead Zhang to use and/or disclose confidential Precigen information, especially in connection with any work Zhang does on Arcellx's gene therapy and CAR-T platforms. This constitutes a further breach of the Agreement.
- 78. Zhang breached the Agreement by failing to return confidential Precigen-owned information in his possession and, in fact, tampering with and/or deleting Precigen property in his possession by, for example, wiping his iPhone of all its data, deleting numerous files from one of his laptops, and installing a new operating system on his other laptop with the result that confidential Precigen information would be lost.
- 79. Zhang's conduct has violated, and threatens to continue to violate, Precigen's legitimate protectable interests, including, but not limited to, Precigen's right to protect

its trade secrets. In addition, Zhang has caused, and will continue to cause, serious and irreparable harm and injury to Precigen.

- 80. No legal remedy can adequately protect Precigen from Zhang's breach of the Agreement. *See* Ex. A, ¶ 13. Monetary damages are unascertainable and, in any event, are, on information and belief, beyond Zhang's ability to satisfy. If Zhang is permitted to breach the Agreement, Precigen's competitive advantage, reputation within the industry and as an innovator, and intellectual property assets will be irreparably injured.
- 81. It will be impossible to measure that damage monetarily, as it will be impossible to determine exactly when Arcellx would have otherwise been able to bring competitive products to market, or whether Arcellx would have been as effective in sales, marketing, or product advancement without Zhang's assistance.
- 82. Precigen faces immediate and irreparable harm as a result of the conduct described in this Complaint. Injunctive relief is necessary to afford Precigen adequate relief, especially given that the full extent of Zhang's wrongdoing is still unknown.
- 83. If Precigen is not granted injunctive relief, the harm it will suffer substantially outweighs the harm to Zhang if such relief is granted. As described above, the damage to Precigen if it loses its competitive advantage over Arcellx is substantial. Zhang, on the other hand, is free to work for many employers in many different industries, so long as he does not violate the reasonable non-compete provision of the Agreement.
  - 84. There is a substantial likelihood that Precigen will prevail on the merits.
- 85. The public interest will be served by granting the requested relief in that the public policy supporting respect for contractual obligations and the ability to maintain

confidentiality of trade secrets, particularly where, as here, Precigen has made substantial efforts to ensure the confidentiality of its trade secrets and confidential information.

86. Zhang's actions were and are willful and malicious.

# COUNT II – DEFEND TRADE SECRETS ACT VIOLATION 18 U.S.C. § 1832 et seq.

- 87. Precigen incorporates each of the foregoing numbered paragraphs 1-69 of this Complaint as if fully set forth herein.
- 88. Precigen owns and possesses substantial trade secrets that it utilizes in its business. These trade secrets give Precigen an advantage over competitors who do not know or use them. Precigen derives independent economic value from these trade secrets not being generally known to or readily ascertainable by others.
- 89. Precigen's trade secret and confidential information relates to products and services intended to be sold or used in interstate commerce. Although Precigen is headquartered in Germantown, Maryland, it has offices and research labs in Ghent, Belgium, and Sioux Center, Iowa. Precigen's confidential and trade secret information is thus developed, maintained, and shared not only in Maryland, but well beyond Maryland's borders. In addition, Precigen offers its technologies embodying its confidential and trade secret information throughout the United States and internationally.
- 90. These trade secrets include details regarding manufacturing processes, gene delivery, and regulation of gene expression, which provide Precigen with substantial commercial advantages over its competitors as it relates to gene and cell therapies.
- 91. Precigen has taken reasonable measures to protect the secrecy of its trade secrets, including, without limitation, requiring employees and consultants, like Zhang, to sign confidentiality agreements before allowing access to Precigen's trade secret and confidential

information, and by strictly limiting any and all access to Precigen's technology, both internally and externally, as more fully described above.

- 92. Zhang acquired Precigen's trade secrets under circumstances giving rise to a duty to maintain their secrecy, both because of the confidentiality and other requirements of the Agreement, and owing to his duty of loyalty as a high-level employee of Precigen.
- 93. Without permission, Zhang wrongfully conveyed, and poses a serious threat of continuing to convey, Precigen's trade secret information to Sibiono and also to the general public through, for example, the filing of patent applications disclosing Precigen's trade secret information.
- 94. Upon information and belief, without permission Zhang wrongfully conveyed, and poses a serious threat of continuing to convey, Precigen's trade secret information to Sibiono through his employment and/or service to Sibiono through SSTEC, unbeknownst to Precigen and in one or more areas in direct competition to Precigen.
- 95. Zhang has wrongfully destroyed the trade secret property belonging to Precigen by, for example, tampering with and/or deleting it from his company-issued laptops and iPhone.
- 96. Zhang's actions constitute a misappropriation of Precigen's trade secrets under the Defend Trade Secrets Act, 18 U.S.C. § 1836.
- 97. Additionally, Zhang is highly likely to disclose Precigen's trade secrets through his employment with Arcellx.
- 98. Zhang's use and threatened use of Precigen's trade secrets has caused, and will continue to cause, irreparable injury to Precigen. As such, Precigen is entitled to temporary, preliminary, and permanent injunctive relief prohibiting Zhang from misappropriating (or

enabling others to access or use) the trade secrets, and requiring that Zhang turn over to Precigen all materials constituting, reflecting or embodying such trade secrets. Precigen has no adequate remedy at law. Specifically, damages are extremely difficult to ascertain and, unless injunctive relief is granted as prayed for herein, Zhang will continue to injure Precigen's existing and prospective business, including both in the United States and internationally.

99. Zhang's actions were and are willful and malicious, thus justifying exemplary damages and attorney's fees.

# COUNT III – MARYLAND UNIFORM TRADE SECRETS ACT Maryland Code, Commercial Law § 11-1201

- 100. Precigen incorporates each of the foregoing numbered paragraphs 1-69 of this Complaint as if fully set forth herein.
- 101. Precigen owns and possesses substantial trade secrets that it utilizes in its business. These trade secrets give Precigen an advantage over competitors who do not know or use them. Precigen derives independent economic value from these trade secrets not being generally known to or readily ascertainable by others.
- 102. These trade secrets include manufacturing processes, related devices for such manufacturing processes, gene delivery and regulation of gene expression, which provide Precigen with substantial financial advantages over its competitors in developing and commercializing gene and cell therapies.
- 103. Precigen has taken reasonable measures to protect the secrecy of its trade secrets, including, without limitation, requiring employees and consultants, like Zhang, to sign confidentiality agreements before allowing access to the trade secret and confidential information, and by strictly limiting any and all access to Precigen's technology, both internally and externally, as more fully described above.

- 104. Zhang has disclosed and used Precigen's trade secrets without Precigen's consent, in violation of the Maryland Uniform Trade Secrets Act, Md. Code. Ann., Comm. Law § 11-1201 et seq. by disclosing to Sibiono Precigen's trade secrets and/or confidential information, and by permitting the publication of such material and by seeking patent protection around the world with documents that disclose Precigen's trade secret information.
- 105. At the time of Zhang's disclosure and use, Zhang knew or had reason to know that he had acquired or derived the trade secrets under circumstances giving rise to a duty to maintain their secrecy or limit their use. Indeed, Zhang's unlawful conduct as set forth above was in disregard of an express Agreement of confidentiality.
- 106. Zhang has also disclosed and/or threatens to disclose Precigen's trade secrets to Arcellx, with whom, upon information and belief, he has accepted employment and started working.
- 107. Zhang has wrongfully destroyed the trade secret property belonging to Precigen by, for example, tampering with and/or deleting Precigen property from his company-issued laptops and iPhone.
- 108. Zhang's actions have substantially harmed Precigen, entitling it to damages, reasonable royalties, and injunctive relief.
- 109. Zhang's actions were and are willful and malicious, thus justifying exemplary damages and attorney's fees.

### COUNT IV – BREACH OF FIDUCIARY DUTY Maryland Common Law

110. Precigen incorporates each of the foregoing numbered paragraphs 1-69 of this Complaint as if fully set forth herein.

- 111. A high-level employee such as Zhang, who reports directly to a Vice President of the company, owes Precigen a duty to operate with honesty and full disclosure to Precigen and to act in its best interest rather than his own.
- 112. In engaging in substantial efforts on behalf of a competitor to Precigen, and contributing to and permitting himself to be named on international patent applications for that competitor, and having misappropriated confidential and/or trade secret information, Zhang has breached his fiduciary duty to Precigen.
- 113. In accepting employment with Arcellx, on information and belief in areas that directly compete with the business or activities of Precigen, and through which it would be virtually impossible for Zhang to operate without the misappropriation or disclosure of Precigen confidential or trade secret information, Zhang has breached his fiduciary duty to Precigen.

In tampering with and deleting trade secret and Precigen-owned information from his company-issued laptops and iPhone, Zhang has also breached his fiduciary duty to Precigen.

- 114. Such breach threatens to result in irreparable harm to Precigen that can only be remedied by injunctive relief.
  - 115. Zhang's actions were and are willful and malicious.

#### **PRAYER**

WHEREFORE, Plaintiffs request that:

- 1. Plaintiffs be granted specific performance of the promises made by Defendant in the Agreement;
- 2. Defendant be temporarily, preliminarily, and permanently enjoined and restrained from using or disclosing to any person any trade secrets and/or confidential information of Plaintiffs;

- 3. Defendant be temporarily, preliminarily, and permanently enjoined and restrained, from engaging in any work or activity for Arcellx or any affiliate thereof, for a period of at least one year;
- 4. Defendant be compelled to return to Plaintiffs all property wrongfully obtained, including Plaintiffs' trade secrets, know-how, and other confidential information;
- 5. Defendant be compelled to assign his rights in all patents and patent applications filed during the term of Defendant's employ with Precigen, including but not limited to the Applications specifically named herein;
- 6. Defendant be compelled to seek to obtain assignment to Precigen all patent applications filed by Sibiono with his involvement or on which he is named as an inventor;
- 7. Defendant be compelled to resign from his employ/advisory position with Sibiono;
- 8. Awarding Plaintiffs past and future damages for the harm caused by Defendant's wrongful acts, plus prejudgment and post judgment interest;
  - 9. Awarding Plaintiffs exemplary damages;
  - 10. Awarding Plaintiffs attorneys' fees and costs of this action; and
  - 11. Awarding Plaintiffs all other relief as may be just and proper.

WHEREFORE, Plaintiffs pray for judgment in their favor and against Defendant for appropriate injunctive relief, attorneys' fees, and any other relief that the Court deems just and proper.

#### JURY DEMAND

Plaintiffs demand a trial by jury on all issues in this case, insofar as permitted by law.

Dated: June 3, 2020 Respectfully submitted,

<u>/s/</u>

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Attorneys for Plaintiffs

# **VERIFICATION**

I solemnly affirm under the penalties of perjury that the factual allegations in the foregoing Complaint are true to the best of my knowledge, information and belief and that the Exhibits thereto are true and correct copies of those documents.

/s/*	June 3, 2020
NAME: Donald Lehr	DATE

TITLE: Chief Legal Officer

<sup>\*</sup>Counsel hereby certifies that he or she has a signed copy of the foregoing document available for inspection at any time by the court or a party to this action.

# **VERIFICATION**

I solemnly affirm under the penalties of perjury that the factual allegations in the foregoing Complaint are true to the best of my knowledge, information and belief and that the Exhibits thereto are true and correct copies of those documents.

NAME: Donald Lehr

TITLE: Chief Legal Officer

June 3, 2020